

0590

1023

#1 3



RAW SEQUENCE LISTING

DATE: 10/29/2002

PATENT APPLICATION: US/09/728,552

TIME: 10:24:26

Input Set : N:\Crif3\RULE60\09728552p.txt

Output Set: N:\CRF4\10292002\I728552.raw

3 <110> APPLICANT: Choo, Kong-Hong Andy
 4 Du Sart, Desiree
 5 Cancilla, Michael R.
 7 <120> TITLE OF INVENTION: A NOVEL NUCLEIC ACID MOLECULE
 9 <130> FILE REFERENCE: Davies Col
 11 <140> CURRENT APPLICATION NUMBER: 09/728,552
 12 <141> CURRENT FILING DATE: 2000-12-02
 14 <150> PRIOR APPLICATION NUMBER: 09/078,294
 15 <151> PRIOR FILING DATE: 1998-05-13
 17 <160> NUMBER OF SEQ ID NOS: 29
 19 <170> SOFTWARE: PatentIn Ver. 2.0
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 19
 23 <212> TYPE: DNA
 24 <213> ORGANISM: DNA primer
 26 <400> SEQUENCE: 1

ENTERED

27 ggattacagg yrtgagcca 19

29 <210> SEQ ID NO: 2

30 <211> LENGTH: 19

31 <212> TYPE: DNA

32 <213> ORGANISM: DNA primer

34 <400> SEQUENCE: 2

35 rccaytgcac tgcagcctg 19

37 <210> SEQ ID NO: 3

38 <211> LENGTH: 80595

39 <212> TYPE: DNA

40 <213> ORGANISM: Nucleotide sequence of HC-contig

42 <400> SEQUENCE: 3

43 gaattctcct gcctcagcct cccaagtagc tgagggtaca ggtgccagcc accacgtcca 60
 44 gctaattttt gtatttttagt agagacggg tttcaccgtg tttgccagcc tggatatcaa 120
 45 ctcctgacct caagtgatct gcctgcctca gcctcccaa atgctaggat tacaggtgtg 180
 46 agtcaccgca cccagccctt ctttcagttc tatcacctct ttttgcata tttgtatgag 240
 47 agctttatta ttaggggac atacatttaa aattgttatg tcttattgat agattgatct 300
 48 gtcattatga atgtctgtat tcattccctg atagtatttc tttttctaaa tatttttctg 360
 49 aatgtgtctg ctattaacat agccactctg gctttttaa attagtattt ttatggtata 420
 50 tatttttccct tttttttttt ttttaagttt agatgttatg tttccttata cttaaagtgg 480
 51 gtgtcttata ggcagcatat atctgggtct tgatgtatta tttaatctga taatctcaac 540
 52 cttttttgtg gagtgtttag gccatttaca tttagtgtaa ttatagacat ggtttgattt 600
 53 gctataccat cttttcattt gttttatatg tgagccatct tttcattgtt cttttttcat 660
 54 ctttgaccat tttctttagt actgaatact ttttttgat ttcattatat ctattggcct 720
 55 ttttagttata cctcttaaaa ttttttttct tgttttatgt aggatttata atatacatct 780
 56 ttaacttatc acagattacc ttcaaatagt attttaccag ctcaagtgtg atgtagaaac 840
 57 cttacaagag tatattttca tttctgtctc ctaattttta tgctatgtct ataatacatt 900

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/728,552

DATE: 10/29/2002

TIME: 10:24:26

Input Set : N:\Crif3\RULE60\09728552p.txt

Output Set: N:\CRF4\10292002\I728552.raw

```

58 aggtttgttg ttgtttgttt ttaccttatt gctgttggtt ggggtcagca aacattttct 960
59 gtaaaagggt agatagtaca ggcataacct ggagatactg tgggtttggt tccataccac 1020
60 cacaataata caaatatgca agaagtggat atcacaataa agtgagtcac acaagtcttt 1080
61 tggcttccca gtgcatataa aagttttgct tatactacac tgtagtctgt taagtgtgca 1140
62 atagtgttat gtctaaaaaa acacataacct taattttaaa atgctttatt actaaaaaat 1200
63 gctaacaatc atttgagcat tcagtgaagt gtaatctttt tgctggtgga aggtcttttc 1260
64 ttattgatga ctgacgggg gtcagggtgt gaagcttagg gtggctgtgg cagttttotta 1320
65 aaacaacagt gaagattgca atatcagttg actcttctct tcatgaaaga tttctctcta 1380
66 tgtgtgatg ctttttgata gcattttatg cacagtagaa cttctttgaa aattggatca 1440
67 atcctctcaa accctgctct gctttaacaa cctaagttaa tataatattc tgaatccatt 1500
68 gttgtcattt caacaatttt cacagtgtct tcaccaggag tagattccat ctcatcttct 1560
69 gagatggaat ctttgtctat ccataagaag aaattcctca tctgttcaag ttttatcatg 1620
70 agattgcagc aatacagtc tgtcttcagg cctcacttca cttttaattc cagttctctt 1680
71 gctgtttcta ccacatctgt ggttccttcc tccattgaag tcttgaacct ctccaagtca 1740
72 tccatgaggg ttggaatcga cttcttccaa attcctgtta atatttatat tttgacctcc 1800
73 catgaatcat gaatgttctt aatggcacct ggaatggtga atcctttcca aaagggtttc 1860
74 aatttactta gtccagatcc atccatccag aggatccact ttcaatgcca gttatagcct 1920
75 tatggaatgt atttcttcaa taataaggct tgaaagttga aattactcct tgatccattt 1980
76 tctgcaaaat agatgttgtg tttagcaggca tgaaagcaac attaactctt ttgtacatgt 2040
77 ccacagagc tcttgggtga ccaggatat tgccagtga cagtaatact ttgaaaggaa 2100
78 ttatttttct tagcagtagg tctcaacaat gggcttaaaa tatttgggtcc accattctgt 2160
79 aaactgatgt gctgtcatct aaactttgta gtttcattta tagagcacag gcagagtaga 2220
80 tgtagcataa ttcttaaggg acttaggatt ttcagaatgg taaatgaaca ttggcatcaa 2280
81 tttaaatcac tagctgtatt agcccccaac aagagagtca gcctattttt tgaagctttg 2340
82 aagccaagcg tcgacttctc ctccctggtt acaaaagtcc taaatggcat cttcttccaa 2400
83 tataaggctg ttttatctac attgaaaatc tgttgtttag tgtagccacc ttcacatag 2460
84 atactatcta gatctcttgg ataacttgtg cagcttctac atcagcattt gctacttcac 2520
85 cttgtactct tatgtaatgg agtggcatct ttctctgtac ctcatgaacc aacctctgct 2580
86 agcttccaac ttttcttctg tagtttctct gcctctctca gccttcatag acttgaggat 2640
87 agttagagac ttgctttgga tttagatttg gcttcaggaa atgttgtggc tggtttgatc 2700
88 ttctatccag accactaaaa ctttatccat atcagcaata aggctgtttt gctttcttat 2760
89 tatttgtgtg ttactggag tagcactttt aatttgcttc aagatatatt tctttgcatt 2820
90 cacaacttgg ctgactggtg caagaggcct agctttcaga ctatcttggc ttttgacatg 2880
91 ccttctcac taagcttaat catttctagc ttttgattta aaatgagaga tgtaggccag 2940
92 gcacagtggc aggcacagtg gcataatgct gtaattccaa cacattaaga ggccaagggtg 3000
93 ggaggattgc ttgaaccag gaggtggagg ttgtagagat cacaccactg cattccgtcc 3060
94 tggatgacag agcaagacct ttctcaaaa aaaatgagag gtgtgcttct tctttttgtt 3120
95 tgagcccata gaagccatg tatgattttt aattggccta atttcaatac tgttgtgtct 3180
96 cagagaatag ggaggtctga agagaggag agaggtgggg gaatggctgg tcagtggagc 3240
97 agtcagaaca cacataacac taataaattg tttgctgtct tatatggatg tggtttgtga 3300
98 tgccccaaa caattacaat agttacagca aatatcactg atcacagatc accataacag 3360
99 atataagaat catggcaag tttgaaatat tcttgagaat tagcaaagtg tgacacagag 3420
100 aaacaaagtg agcacatgcc gttggaaaaa attggtgttg atagacttgc tccatcgcaa 3480
101 gtttgccata cgccttcaat ttataaaaa cacaatatct aggaagttca ataaagtga 3540
102 gtgcaataag atgaagtatg cctgtaaata tttcaggctt tccagaccat aggggttctg 3600
103 ttgcaactgc tcacctctgc cattatagca tgaaagcagc tatagaaaat atacataaat 3660
104 gaggcctgta atcccaacac tttgggagcc caaggtggat ggatcacttg aggtcaggaa 3720
105 ttcgagacca gcttggccaa catggcaaaa cccgctctct actaaaaata caaaaatgag 3780
106 ccaggactac gcatgctgt agtcccagct acttgggagg ctgaggcagg agaactctct 3840

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/728,552

DATE: 10/29/2002

TIME: 10:24:26

Input Set : N:\Crif3\RULE60\09728552p.txt

Output Set: N:\CRF4\10292002\I728552.raw

```

107 gaacccggga aggggagggtt acagtgaagcc aagattgtgc cactgcactc cagcctgggc 3900
108 aacagagtga gactgtctca caaaaaaaaa aaaaggaaaa gaaaatacac ataatgaat 3960
109 gtatgtggct gtgtaccagt atatcctcat gctctagctt gccaacctt gctttacact 4020
110 gtcagttacc ttctaaagag attaaaaatc ataacaatat ctattacgtt tattcacatc 4080
111 ctagtgtcat ttcttcctta tgtagaatca aatttcattc tggatcataa tttcttcttt 4140
112 ctaaataatt tcctttaata ttttttatag cacagggtca atagcaatgc attatgcaat 4200
113 tcattgctat tagacctgtg ctataaaata gcaatgaatt atgtcagttt ttatttgtct 4260
114 gaaaaagttt tttgtttttg aaataacttt ttgctgggta tataaatoca tgttgcataa 4320
115 cttctctttt cttcagcact ttaatgaagt cactcagtta tcttctggct tgtatagttt 4380
116 ctctggctgc cttcaagatt ttttcattgt ctttaatttt tagcagttt atgtgtctag 4440
117 gagtgtattt ctttgtattt atccttttgg gggcctctta atttctttga tccttttttt 4500
118 cttttttttt tttttttaat cagtttttgt ctgtctctc aagtgggctg aaaaaaaaaa 4560
119 aaaaataaaa tcatagttta aaaaactaat tttggaaat tttcagctat catttcttca 4620
120 aatattttat ctactctatg ctcccctcct cccctttcct tctgtgactc aaattacagg 4680
121 tatatttaac cattttattt gttcacggca cttggatgct ctgctttctt attttttgct 4740
122 tttcattttg gataatttct actgacctat cttcaagttc actgattctt ttctcagtc 4800
123 tatctagtgt gctcaacgcc tgttgaagaa atcctttgtc tttaatatca tgttttttat 4860
124 ttctagcatt ttcattgaac tctttgttct ggtttccatc tctctactca cttttttttt 4920
125 tttttttttt tttttttgag acagagtctc gctctgtcac ccaggctgga gtgtagtggc 4980
126 gcgatctcgg ctcaactgcaa cttccgtccc ctgggttcaa gtgattctcc tgcctcatcc 5040
127 tcccagtagg ttggaattac aggtgcccac caccgtggct ggctaatttt tgtatttttt 5100
128 tagtggaac aggttttcac catgttgccc aggtgtgtct tgaattcctg acctcagggtg 5160
129 atccacctgc ctccagctcc ccaattgtcg aaattactgg catgaggcac tgcacccagc 5220
130 tctgtgaca ttttttatct tttgtgcat tttgtctacc ttttccatga aatcctttta 5280
131 catagtagtc atagttactt tcaattcctt gtctgacagt tctgacattc aagtctaggt 5340
132 ctgttaatag ctttgtgagt ctgttaacag ctttttttca ttcttgtctg tgtgttttgt 5400
133 atttcttgat tgtatgccaa atattgcctg taaaataaac ttagataagt catacttcta 5460
134 tccagaaata ggcacatttt ttgtgtccag tcattagtgt ggaggagggt tggggcagtc 5520
135 tagtcagtgg ctgaactagg tttggatttg ttgatgctat acttagaatg caccagactt 5580
136 ccattcactg caagagtggg ctgctgcgct ttgtgattca tgtgaggcct gaattgtggg 5640
137 tttttcctta gtgtgtccct ccagtctcag atttcagcaa gtcttcatat ctgtgccaca 5700
138 gaaggaatct gacctatgct ctttttgacc tccccaagtg atcaactgtt gcttgttata 5760
139 gcttgtcatg gagtaagagg gtgttttttt agttttcatc ctccagcctt ggtcttgggc 5820
140 cctgagctcc tagactccag gagtggatgg aatccagtga tttctcagta attcagcccc 5880
141 ttctccagta gtggcagatc tctgctttgt atcagtgcac gatcctgggc tgagctcatt 5940
142 ttctgccctt cctcagatgg cagacagctc ttgctttcac cctctacca aaggcagtc 6000
143 atcttttctt gggcctctcc ccattgaact tatgactttc acataagaga agggctcatg 6060
144 tatcagagaa ttctgtgact ttgtgccaca tacagagtct ctcagttctc ttgccctgcc 6120
145 ccagtctttt ttgtgagcac ctagttaga cccttgaga agagcaagga agcgagtatg 6180
146 gacttctttt gtgtctgtcg attgctttgt ttctcaactg ctactcttgg actttaagaa 6240
147 ttcattaaaa tttcagctgt tttcttttat tctttttgtt tttctttttt tttttttttt 6300
148 ttttttagat gagtcttgc tgtttgccca ggtggagtgt cagtgggtgt atcttggctt 6360
149 gctgcaacct ccgcctcccg ggttcaagcg attctctgc ctccagctcc caagtagttg 6420
150 ggattacagg tgccaccac cacacctggc taatttttgt attttttagta gacacagggt 6480
151 ttcaccattt tggtcaggct tgtctcaaac tctgacctc atgatctgcc cgcctcagcc 6540
152 tcccaaagtg ctgggattac aggcattgag caccgcgcca ggcctcagct gttctctttt 6600
153 tacctgtctg gatggctagt tttctgtgtc aacttgactg ggccatggga tgtccagata 6660
154 tgtaattaaa cagtatttct ggggtgttct gtgagggtgt cttcagaaga gatttgcatt 6720
155 tgaattgggt aactaagtaa agcagagggc cctgtctagt aggggtaggc atcatccagt 6780

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/728,552

DATE: 10/29/2002

TIME: 10:24:26

Input Set : N:\Crf3\RULE60\09728552p.txt

Output Set: N:\CRF4\10292002\I728552.raw

```

156 ctgttgagga cttgaataga acaaaaggca ggggaagggtt ggaattgccc cctctctgct 6840
157 tgagctgaga catctatcct gcccttggca ctcttggttc tcaggggttc agacctggat 6900
158 tcctggtctc caccttgccc atggcagact gtgggacttc tcagcctcct atctaattaa 6960
159 taaatctctt catacacaca cacacacaca cacacacaca cacacacaca 7020
160 ccctatgtat ccttctgttt ctctgcagaa ccatacttaa tacacctgct tttatgacga 7080
161 ttacctatcg attctgtatt ctgccaaaac tgaaaacagt tcattttttcc atctcttctc 7140
162 agagaggctt gtcagccatt agttctctga tgggctcaag aagttatgoa gttttttttt 7200
163 tctcactggt aggatggaat tgatattctg ttgaaacttt ctatacctaa gtggaaactt 7260
164 gttttgaggt tattttctct acttactttt gctggaaatg gaacactctg tatctagtta 7320
165 agacacataa actgacttgt gataccataa tgttgtgttg aattttatat tcttagaaaa 7380
166 tcatctgtca aggtgttaac taatggcaaa gcatttaata aatcagcatt catgtattca 7440
167 ggtgctctga attatctgac ttttaaattc ttactttata aatgagaaaa ttggggcatg 7500
168 gaaaagttaa ctctcctaac cccgaattat tacattatta aggacaggac ttagaggcca 7560
169 gatattctaa gtcatttaata ttctttggct cacagaattg gcagtataac ctaaaggtaa 7620
170 taactagggtg attttctttt atatcaatta aatatgtcag ttttcaaata ttcataagta 7680
171 cctactgtgc agggaaaagaa catgccatac aaaagatgta gtccaggcct ttaagaaact 7740
172 ttcatttaat gggaaactcaa gaagtgtaca tataaggagg gaagtagcag tatggtacaa 7800
173 gataatacat acatatcagt gaatgatatt gccaaaaagt gctattgata gagaaataat 7860
174 tcatttctgc aaacagctgc tgatctccta ctgaaaacag aggagggaga acaggacgcc 7920
175 tcgtggctag gatagaagag aaagaccttg agttgagcct tgaacagtat ttaatattca 7980
176 aaaggttaa agaggagagc aattgaggag gggagaatag ttccagcaca aatgatggtg 8040
177 tacaagatga acacagtcag taaagagcag actggtctgg atggagagga ggatttgcac 8100
178 catttgggat tacgtcattt agacccttga aagccaggat tgagtaaagc cacagtgaag 8160
179 cgactggctc gtatggaagc tttattttta gaagattaat ctggtagtga catgtgccaa 8220
180 aaactgaata ggtagaaatg agatgcagag agcccagtta gaactaagtc tgggtgcagta 8280
181 atgcaggatt gaggcaataa acaccaaact acagtatcac cagataatgg atgtttgaac 8340
182 ggacggttta aaggaaaatt gatggtattt ggtaatttat tagataatcc agggccatgg 8400
183 aatgagaggg gaaaatgact aaccatagtc atcaaattgt ttttcttaat gaatctgaat 8460
184 tttggtgtaa gagcaacatt ttcttaggcc ttgectagtt ggtacagctg actatgataa 8520
185 tgactgctac catgcttgtt cctcttttag cagctgtgag tccccacca gccaaacaat 8580
186 gagcctcttg aaaaggacga tgccctttca ctctctcca agtgcttggc aaataggagg 8640
187 ccttttgaag ttactttata gttaggggtt cccagtgagt atttgaata ttaagtcacg 8700
188 cccgtggttg acagcatggc cctactgctc atcatcagct attaacctta ggcaagttaa 8760
189 tgaacttttc taagccccag tctactcatt tataaagtgg gattattaat aatgtctact 8820
190 tcataaaatt atgaagcctg agttaggtca ttcagatagt gtttagtctg attcttcgaa 8880
191 cctagtaaac agtcagtaaa cagaagcaaa tgccacatgc ctgatttata tccaagggga 8940
192 gaaaggtaaa agtgaaattt tcatgattta tggattcaaa ttatacattt caaagatgct 9000
193 ttataagcta ttgttttggg aagaagaatt gagctgaaac agaattttct gacagcagtg 9060
194 attattaaat ggtgaaatag gctattgatg tcttttagagg atatagatgt tcaccttttg 9120
195 catataagtg cacaaaaatt cactaagtag atatgtctgt ctacacagag agagagagcg 9180
196 tgagagcatt aaagttagta aacatccccc tcgctttttt ttttttgaga cagggtctta 9240
197 ctctgttgcc taggctggag tgcagtgggt caatcggtgg tcactgcagt ctcaacatcc 9300
198 tgggctcaag cgatcctctc gctcagcctc ctgagtagct gaggtgtgca ccaccacacc 9360
199 cggtataatt ttaaattttt ttattgtaaa ggtgagggtt caccatgttg ccaggtctc 9420
200 aaactcctga gctcaagcaa tctgctcact tcagcctcca aaaatgctgg gattacaggc 9480
201 gtgagccacc acgcctggcc agtaaacccc attcatttac atcatcttac ttgtccctcc 9540
202 aaaatcctgc aaagttagta ggttctgtct ttatttgtta tttaggtgaa gaacttgaag 9600
203 tgggtgttgag gaatagggtg tttgccaaag gtcacgcagc tggagtggca gagctgtata 9660
204 ctcttctgat tccaccaacg ctgtttacat cacatctgga gaaaagtgct ctgaggcaca 9720

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/728,552

DATE: 10/29/2002

TIME: 10:24:26

Input Set : N:\Crif3\RULE60\09728552p.txt

Output Set: N:\CRF4\10292002\I728552.raw

205	gatgttttagt	gggaggggatg	agacacagggc	tgcaatgcct	aaagataatc	gggaataaaaa	9780
206	gcagaaaaca	agacgtttgt	ttctgttaaa	atgagacaga	aaataaggcg	tttgttggtt	9840
207	gggattgagc	acttgagaaa	gtggggagcg	atgtgatttg	ggtgagactg	ctcctgggaat	9900
208	gctgcatctg	gttctggact	actcattact	aggcttatag	aaactagctg	gaggagggttc	9960
209	aaagaaaagc	tccaaaatga	ttagcgggct	gacggggattg	atttataaga	aattattaaaa	10020
210	gaattaaatg	tgtatagctc	agctaagcaa	agatgaaaga	gaccagctaa	atgtatacaa	10080
211	atatctgaaa	cgtgcaaact	ttaaaaagag	agattaatta	tttaacatga	tacacggggg	10140
212	cacaatatgc	agtcacagga	tgaaaatttc	agctgagtat	ctagaagaat	tccccgatag	10200
213	tgaatctgtt	aaggctgtct	gtagtgtggc	ctttccctgg	agaggcaata	gaaatttcaa	10260
214	gtcttacgat	tttaaaagtt	tcttggaac	taggtattag	atgatgttag	agaattatta	10320
215	ttaatttggt	caggtatgat	aatggtattg	tagttctata	agaaaaattg	tatttttttag	10380
216	agttacatac	cctgaaatat	aagcatagaa	tatgatgtag	gagatttgct	ttaaaatacc	10440
217	acagtaagga	aagaaaggaa	ggaggaagaa	aagaaaggaa	ggggaagaaa	gggaaaaaga	10500
218	ggcaaagaag	gaagagaagg	taagagaaag	aaaaagaatg	aaggaagaag	gctgggcact	10560
219	gtggctcatg	cctataatcc	cagcatttag	gaggccaagt	tgggaggatc	acttaattaa	10620
220	gccagaggat	tcaaggctgc	agtgaactgt	gattgcgcca	ctgcaactcca	gcctgggtgg	10680
221	cagagtgaag	ccctgtctct	aaaaaaaaaa	aataagttaa	aaagaaagaa	aaggatagat	10740
222	gaagtattgg	aagatgttgg	taatgttgaa	cctgaaggaa	gttaatatgt	gagttcactt	10800
223	tcctcttcag	tcttctttat	gtatgtttgc	caactttcat	aataaacaat	ttaaattata	10860
224	ttttcctgat	caaaaacttag	tagcagtatt	aatccctggg	cttcctgact	agaacagcct	10920
225	cattaccaca	tgggcagagt	tctggccgac	cagggaccac	gtagtgggtc	accatcttgc	10980
226	tctggtaaatg	tggctctggc	tgaaggggccc	tttctaagggt	tgtagataga	aatccaggaa	11040
227	acttgtaga	actgcagacc	tatcagggtg	cctgcaggag	gtgagtctac	taagggtgaaa	11100
228	aagcagaggg	cagaggtcgt	gattagcagc	tgaccgcccc	ctgcttttct	gtccctcatt	11160
229	cgtggaaaat	tgagtggagc	tcaattttga	gtggagctct	aagtagctcc	actttagtag	11220
230	attgagtggg	gctctaagtg	tcttcagaat	agcaaaacac	tagtttttct	tttcttttct	11280
231	tttttttttt	ttttggagac	agagtcttgg	tctgtcgccc	aggctggagt	gcaatggcac	11340
232	gatctccgct	cactgaactc	tgccctcccg	gttcaagcga	ctctcctgcc	tcagcctccc	11400
233	gagtagctgg	gattacagggt	gcccaccacc	acgcccagct	aatttttcta	tttttagtag	11460
234	agatgaggtt	tcaccgtgtt	ggccaggctg	gtctcaaact	cctggcctca	agtgatccgc	11520
235	ctgccttggc	ctcccaaagt	cctgggatta	caggtgtgag	ccaccacacc	cagctgcaaa	11580
236	accctatttt	tcttgaatgg	agaaacactt	tccccttatt	tattgagttt	gggaagcaag	11640
237	aagaggggta	attcattaag	tgaaaatttc	caaaatccag	aaaacatcga	taaagcagca	11700
238	gcttaatttt	tttaaggaag	aattttttta	actatcttct	tttgagcctc	tttaggaaga	11760
239	cctcacgtcc	ttgccttgaa	tgttgagagt	gggaaatcca	gggagttttg	gaatgcagtc	11820
240	cttatgtctg	cttttttggt	tgttagagaa	atataaatat	tttatctagg	ttttgctgat	11880
241	ggcagtcagg	catgaacaca	accactgtt	tgagaagctg	taatttctga	atctctgcag	11940
242	agtgcacatc	taggccagca	aatggcagta	agagtgaagt	ggatttagct	cagtgtgaag	12000
243	atgaactcca	gaaccatcgg	ctctgactga	aagtgaagcg	gcagcccgct	tgtgggaaag	12060
244	ctggctggag	tctctctcat	aagcaggcat	tctttttctc	cagcccgctc	ctgtgttggt	12120
245	ttgggcccac	ggtaagcctc	ctggcctcta	ggctgtgaac	cccaccatcc	tctctgcct	12180
246	cgccctccaga	gtgattgttc	tgaagcaca	ctggatgtca	ttccctctcc	tgaactccta	12240
247	gcacctacag	ggactccatc	ccttgtgccc	cacatacctc	acacgtagac	attcctaagt	12300
248	aagatttgat	tgaattattg	taaactcagt	gcctcccact	cttctagttg	cctctctgcc	12360
249	tgcctttgta	catttattta	tttatttatt	tatttattta	tttatgagac	agagtcttac	12420
250	tgtatcacc	aggctggagt	ttagtggcac	catctcagct	cactgcaact	tacctccag	12480
251	atcaagcaat	cctcccacct	cagcctcccg	aggagctggg	accataggca	cgtgccatat	12540
252	gcccgggttaa	tttattgtaa	tttttgtaga	gatgggggtt	catcgtgttg	cccaggctag	12600
253	tcttgaactc	ctggactcag	gogattcgcc	cgtctcagtc	tcccaaagtg	ctgggattat	12660

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/728,552

DATE: 10/29/2002
TIME: 10:24:27

Input Set : N:\Crf3\RULE60\09728552p.txt
Output Set: N:\CRF4\10292002\I728552.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 13,14
Seq#:16; N Pos. 371,513,529
Seq#:17; N Pos. 1078,1085,1086,1099
Seq#:27; N Pos. 487,488,489,602

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/728,552

DATE: 10/29/2002

TIME: 10:24:27

Input Set : N:\Crf3\RULE60\09728552p.txt

Output Set: N:\CRF4\10292002\I728552.raw